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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,427	01/05/2006	Yasuaki Tamakoshi	02860.1013	6366
22852 7590 11/09/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER PANI, JOHN	
			ART UNIT 3736	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/563,427	Applicant(s) TAMAKOSHI, YASUAKI	
	Examiner John Pani	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 31-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
2. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:
  - a. Pg. 20, paragraph 3: "In the present embodiment, an example in which, when the body sound data is stored in the data base, as the additional information of the body sound data...will be described".
  - b. Pg. 22, para. 3: "In the body sound data file 21, the body sound data is accommodated...and in every body sound ID, the body sound data is accommodated."
  - c. Pg. 24, para. 2: "In the sound collector information table 25, the information relating to the sound collector which collects the body sound, is accommodated....each kind of information such as the serial number of the sound collector, name of the maker is accommodated."
  - d. Pg. 34, para. 2, all

Please note that the above cited sections are merely meant to be exemplary of the types of errors present throughout the specification. Thorough revision of the specification is required to place the specification in proper idiomatic English.

### ***Claim Objections***

3. Claims 37, 39, 40, 49, and 50 are objected to because of the following informalities:

In reference to Claim 37

In line 4 it is suggested to replace the first instance of "sound" with --sounds--.

In reference to Claim 39

In line 3 it is suggested to replace "section and" with --section; and wherein--. In line 4 it is suggested to insert --further--after "section".

In reference to Claim 40

In line 3 it is suggested to delete the second instance of "of". In line 3 it is suggested to insert --following--between "the" and "additional". In line 3 it is suggested to replace "additional information" with --additional information:--. In line 6 it is suggested to replace "data base," with --data base;--.

In reference to Claim 49

In line 2 it is suggestion to replace "section," with --section; and--. In line 2 it is suggested to insert --further--between "section" and "stores".

In reference to Claim 50

In line 2 it is suggested to delete "of". In line 2 it is suggested to insert --of the following--between "one" and "additional". In line 2 it is suggested to replace "information" with --information:--. In line 5 it is suggested to replace "data base," with --data base;--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 51-60 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See MPEP § 2106.01.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 32-34, 36-40, 42-44, 46-49, and 51-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

In reference to Claim 32

In line 3 it is unclear whether “a plurality of different body sound data” refers to previously mentioned “a plurality of different body sound data” of claim 31, or to a different set of data.

In reference to Claim 33

In lines 2-3 it is unclear whether “a plurality of different body sound data” refers to previously mentioned “a plurality of different body sound data” of claim 31, or to a different set of data.

In reference to Claim 34

In line 2 it is unclear whether “the plurality of different body sound data” refers to “a plurality of different body sound data” of claim 31 or claim 32, or whether these are the same data.

In reference to Claim 36

In lines 2-3 and 4-5 “the identification information of the sound collecting section” lacks antecedent basis. It is unclear whether this refers to the “input identification information of the patient” in claim 31, or some other identification information. In lines 5-6 “the additional information of the body sound data” lacks antecedent basis. In addition, it is unclear in lines 2-6 whether the input section inputs “the identification information of the sound collecting system” only when both “the body sounds are

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collected by the sound collecting section" AND "the data storing section stores...in the data base", or if the input section "inputs...the identification information when the body sounds are collected by the sound collecting system", while a further function of the data storing section is storing "the identification information...in the data base."

In reference to Claim 37

In lines 2-3 "the identification information" lacks antecedent basis. In line 3 "the sound collecting operation" lacks antecedent basis. In lines 5-6 "the additional information of the body sound data" lacks antecedent basis. In addition, it is unclear from the claim whether the input section inputs "the identification...of the body sound" only when both "the body sounds are collected by the sound collecting section" AND "the data storing section stores...in the data base", or if the input section "inputs...the body sound when the body sounds are collected by the sound collecting system", while a further function of the data storing section is storing "the identification information...in the data base."

In reference to Claim 38

In line 3 "the sound collection position" lacks antecedent basis. In line 6 "the additional information of the body sound data" lacks antecedent basis. In addition, it is unclear in lines 4-7 whether the data storing section stores information in the position detecting section, in itself, or in the data base.

In reference to Claim 39

In line 4 "the information of the sound collection data and time" lacks antecedent basis. In line 5 "the additional information of the body sound data" lacks antecedent

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basis. In lines 4-5 it is unclear whether "the information of...time" is merely being referred to as "additional information" or if "additional information" is a particular area for information storage.

In reference to Claim 40

In line 4 "the sound collection position" lacks antecedent basis. In line 5 "the sound collection date and time" lacks antecedent basis. In line 7 "the additional information" lacks antecedent basis. In lines 5-7 it is unclear whether the acquiring section acquires the body sound data from the data base, or whether it acquires the data from elsewhere, and the body sound data merely corresponds to additional information in the data base.

In reference to Claim 42

In lines 3-4 it is unclear whether "a plurality of different body sound data" is the same as or different from "a plurality of different body sound data" of claim 41.

In reference to Claim 43

In line 3 it is unclear whether "a plurality of different body sound data" is the same as or different from "a plurality of different body sound data" of claim 41.

In reference to Claim 44

In lines 2-3 it is unclear whether "the plurality of different body sound data" refers to "a plurality of different body data" in claim 41 or claim 42, or both. In line 4 "the concerned patient" lacks antecedent basis. In addition, it is unclear whether this is a different patient, or "the patient" of claim 41.



In reference to Claim 46

See rejection of claim 36 for similar issues.

In reference to Claim 47

See rejection of claim 37 for similar issues.

In reference to Claim 48

In line 2 "the information of sound-collection position" lacks antecedent basis. In lines 2-3 "the additional information of the body sound data" lacks antecedent basis. It is unclear in the claim what the data storing section is storing where, and under what conditions, as there is no punctuation, and the long series of prepositional phrases makes it impossible to determine what part of the invention is acting on what other part, and under what conditions.

In reference to Claim 49

In lines 4-5 "the information of sound-collection date and time" lacks antecedent basis. In lines 5-6 "the additional information of the body sound data" lacks antecedent basis.

In reference to Claim 50

See rejection of claim 40 for similar issues.

In reference to Claim 51

In lines 3-6 it is unclear whether the identification information, the body sound data, or both are inputted by a input section, as currently written. In addition, it is unclear whether the "input section" or the "body sound data" is "of a patient who is a target of stethoscopy". In lines 1-2 it is unclear whether "a data processing program for

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making a computer to realize functions, comprising:" refers to a data processing program comprising the functions listed thereafter (i.e. that for example "a data preserving function" is a subprogram), or whether it refers to a data processing program capable of making a computer realize the functions listed thereafter.

In reference to Claim 52

See rejection of claims 32, 42 for similar issues.

In reference to Claim 53

See rejection of claims 33, 43 for similar issues.

In reference to Claim 54

See rejection of claim 34, 44 for similar issues.

In reference to Claim 55

In lines 2-3 "the sound reproducing section" lacks antecedent basis.

In reference to Claim 56

See rejection of claim 36 for similar issues. In addition, in lines 3-4 "the case" lacks antecedent basis. It is unclear whether this is a physical case where body sounds are collected, or merely a conditional statement.

In reference to Claim 57

See rejection of claim 37 for similar issues. In addition, in lines 3-4 "the case" lacks antecedent basis. It is unclear whether this is a physical case where body sounds are collected, or merely a conditional statement.

In reference to Claim 58

See rejection of claim 48 for similar issues.

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In reference to Claim 59

See rejection of claim 49 for similar issues.

In reference to Claim 60

Lines 1-7 are unintelligible and should be rewritten in proper idiomatic English.

See previous rejections of claims 40 and 56 for typical issues.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 31-34, 36-44, 46-54, and 56-60 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6,394,967 to Murphy ("Murphy").

10. NOTE: As previously discussed in the 112 2<sup>nd</sup> Paragraph rejections above, it is unclear whether the use of "function" in claims 51-60 refer to subprograms, or merely physical functions that the "data processing program" is used to realize. The examiner has interpreted the claim to mean that the "data processing program" is involved in realizing the subsequently listed "functions".

11. Murphy teaches:

In reference to Claims 31, 41, and 51

A medical examination support system (**100**), including a data processing program (Combination of data collection and organization application program **202**,

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adventitious-sound detection program **203**, probable-diagnosis prediction program **204**, operating system **206**, window manager **214**, and display driver **218**) for making a computer to realize functions, comprising: a sound collecting section (microphones **102**) to collect body sounds of a patient to generate body sound data; a data processing terminal (**110**) to conduct processing the body sound data of the patient; and a data base (training database **207**, or digital storage **120** is a database, as the computer organizes and stores data thereon) connected to the data processing terminal (see Fig. 1); wherein the data processing terminal comprises an input section (mouse **122** and keyboard **124**) to input identification information of the patient who is a target of stethoscopy; a data storing section (digital storage **120**) to correlate the body sound data of the body sounds collected by the sound collecting section with the identification information of the patient and to store the body sound data in correspondence with the identification information in the data base (see col. 7 lines 3-6 and col. 6 lines 54-60); an acquiring section (CPU **112** in combination with data collection and organization application program **202**) to acquire the body sound data corresponding to the inputted identification information of the patient from the data base (program retrieves data, see col. 7 lines 7-15); and a comparison result showing section (screen **228** and display driver **218**) to show a comparison result in which a plurality of different body sound data are compared (multiple channels of sound data are displayed together, i.e. "compared", see Fig. 4).

In reference to Claims 32, 42, and 52

The medical examination support system and data processing program of claims 31, 41, and 51 (see above) wherein the data processing terminal comprises a body sound showing section (screen **228** and display driver **218**) for showing a plurality of different body sound data visually and comparably (each channel is sound data from a different microphone, see Fig. 4).

In reference to Claims 33, 43, and 53

The medical examination support system and data processing program of claims 31, 41, and 51 (see above), wherein the data processing terminal comprises a comparing section (probable-diagnosis prediction program **204**) to compare a plurality of different body sound data and for outputting the comparison result to the comparison result showing section (see col. 15 lines 40-49).

In reference to Claims 34, 44, and 54

The medical examination support system and data processing program of claims 32, 42, and 52 (see above), wherein the plurality of different body sound data are body sound data of a specific patient (In this case, the patient being examined is a specific patient) and include the body sound data acquired by using the identification information of the specific patient from the data base (see col. 7 lines 3-15).

In reference to Claims 36, 46, and 56

The medical examination support system and data processing program of claims 31, 41, and 51 (see above) wherein in the data processing terminal, the input section inputs the identification information of the sound collecting section when the body sounds are collected by the sound collecting section (see col. 6 lines 50-60), and the

data storing section stores the identification information of the sound collecting section inputted as the additional information of the body sound data in the data base ("identification number" see col. 7 lines 3-15).

In reference to Claims 37, 47, and 57

The medical examination support system and data processing program of claims 31, 41, and 51 (see above), wherein in the data processing terminal, the input section inputs the identification information (see col. 6 lines 50-60) of an operator ("physician") who conducts the sound collecting operation of the body sound when the body sounds are collected by the sound collecting section and the data storing section stores the identification information of the operator inputted as the additional information of the body sound data in the database (col. 7 lines 3-15).

In reference to Claims 38, 48, and 58

The medical examination support system and data processing program of claims 31, 41, and 51 (see above), further comprising: a position detecting section (body maps **402-405**) to detect the sound collection position at which the sound collection is conducted by the sound collecting section (col. 7 lines 20-35), and in which the data storing section of the data processing terminal stores the information of the sound collection position detected as the additional information of the body sound data in the database (col. 7 lines 27-35).

In reference to Claims 39, 49, and 59

The medical examination support system and data processing program of claims 31, 41, and 51 (see above), wherein the data processing terminal comprises a timer

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section (system clock) to count date and time at which sound collection is conducted by the sound collecting section (see col. 6 lines 3-19); and wherein the data storing section further stores the information of the sound collection data and time counted by the timer section as the additional information of the body sound data in the data base (see col. 6 lines 9-11).

In reference to Claims 40, 50, and 60

See rejections of claims 36, 46, and 56 (above) in combination with rejections of claims 37, 47, and 57 (above).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 35, 45, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy in view of US Pat. No. 6,544,198 to Chong et al. ("Chong").

Murphy teaches the medical examination support system and data processing program of claims 31, 41, and 51 (see above), but does explicitly teach that body sounds are reproduced by the sound reproducing section, based on the body sound data acquired in the acquiring section. Murphy does suggest replaying the sounds that are saved as data (see Fig. 4, 414, "Playback/Spectrogram"). Chong teaches an electronic stethoscope system for recording sounds from the body. The system

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includes a speakerphone **22** and programming which is used to output the stored sound audibly through the speakerphone, thus allowing for simultaneous visual and audible reviewing of the sound (see col. 7 lines 30-40). It would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the system and programming of Murphy by including speakerphones and programming that allowed the system to audibly reproduce the recorded body sounds, in order to allow for simultaneous visual and audible reviewing of the body sounds, as explicitly taught by Chong.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Pani whose telephone number is 571-270-1996. The examiner can normally be reached on Monday-Friday 7:30 am - 5:00 pm EST.

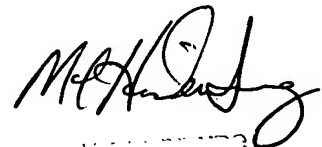
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on 571-272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JP 11/7/07

  
A handwritten signature in black ink, appearing to be "M. H. [unclear]", is written over a faint, rectangular stamp. The stamp contains some illegible text and a date that appears to be "11/7/07".